

Stout

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **37**
- SRM **30.8**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **14.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.3 liter(s)**
- Total mash volume **12.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **9.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **8.4 liter(s)** of **76C** water or to achieve **14.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.2 kg (71%)	79 %	6
Grain	Jęczmień palony	0.2 kg (6.5%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.1 kg (3.2%)	68 %	1200
Grain	Jęczmień niesłodowany	0.6 kg (19.4%)	75 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	15 g	60 min	5.5 %
Boil	Challenger	15 g	60 min	7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	200 ml	Safale